

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 10 and ending at page 2, line 24, as follows:

Constant velocity joints are classified roughly into two types; the fixed type which allows only angular displacement between input and output shafts, and the slide type which allows angular displacement and axial displacement, each type being selected according to application and use conditions. Widely used as fixed type constant velocity joints are the Rzeppa type (hereinafter referred to as "BJ") and undercut free type (hereinafter referred to as "UJ"). The BJ and UJ each comprises an outer ring having a plurality of curved ball grooves in the inner periphery, an inner ring having a plurality of curved ball grooves in the outer periphery, balls incorporated between the ball grooves of the outer ring and the ball grooves of the inner ring, and a cage for holding the balls. The ball groove center of the outer ring is positioned on the outer ring opening side with respect to the outer ring inner spherical surface center and the ball groove center of the inner ring is positioned on the outer ring innermost side with respect to the inner ring outer spherical surface center, ~~said~~ the ball groove centers being offset axially by an equal distance in opposite directions. Therefore, the ball tracks defined by ball grooves of the outer and inner rings are in the form of a wedge gradually contracting or expanding from one to the other of the axial direction of the joint. In the BJ the entire region of each ball groove is curved, while in the UJ, one end of each ball groove straight is parallel with the axis.

Generally, a steering joint for automobiles uses two or more cardan joints. Since this joint provides ununiform velocity if used by itself, two or more joints are disposed to ensure that variation components cancel each other so as to secure uniform velocity property. For this reason, ~~there is a problem~~ exists in that the degree of freedom of design of vehicles is decreased. The use of constant velocity joints, which can secure uniform velocity property at optional angles, as steering shaft joints makes it possible to increase the degree of freedom of the design of vehicles; however, since constant velocity joints have a large play in the direction of rotation, it is feared that such play may cause degradation of steering feel or cause abnormal ~~sounds~~ sounds, in the vicinity of vehicle straight travel. To solve this, Japanese

Unexamined Patent Publication No. 2003-130082 proposes that a pre loading means be provided in the constant velocity joint to reduce track clearances. The track clearances mentioned herein means clearances between the ball tracks and the torque transmitting balls or more specifically, clearances between the ball grooves of the outer ring and the torque transmitting balls and clearances between the inner ring ball grooves and the torque transmitting balls.

Please insert the heading – Summary of the Invention --, in line 16 on page 3 of the specification.

Please cancel the heading “DISCLOSURE OF THE INVENTION,” in line 21 on page 3 of the specification.

Please amend the paragraph beginning on page 5, line 10 and ending at page 5, line 25, as follows:

In this connection, generally in fixed type constant velocity joints, from the functional and processing aspect, there also ~~exist~~exists clearances between the inner spherical surface of the outer ring and the cage outer spherical surface and between the outer spherical surface of the inner ring and the cage inner spherical surface. In the latter case if the axial clearance defined by the spherical clearance between the outer spherical surface of the inner ring and the cage inner spherical surface is smaller than the axial clearance stemming from the track clearance, the inner ring and the cage will abut against each other before the axial clearance stemming from the track clearance is completely reduced; thus, there is a limit to the further reduction of the axial clearance stemming from the track clearance. Therefore, it is desired that the axial clearance between the inner ring and the cage be larger than the axial clearance stemming from the track clearance.

Please replace the heading “BRIEF DESCRIPTPTION OF THE DRAWING,” with – BRIEF DESCRIPTION OF THE DRAWINGS-- in line 4 on page 6 of the specification.

Please replace the heading “BEST MODE FOR CARRING OUT THE INVENTION,” with –DETAILED DESCRIPTION OF-- in line 28 on page 6 of the specification.

Please amend the paragraph beginning on page 12, line 4 and ending at page 12, line 24, as follows:

Next, Figs. 1A and 1B are schematic forms of torque-torsional angle diagrams shown in Figs. 8, 10, and 11A to 11D, in which likewise the vertical axis indicates torque (Nm) and the horizontal axis indicates torsional angle (deg). In the case of the fixed type constant velocity joint used for steering devices, the torque in the vertical axis corresponds to the force for turning the steering wheel, while the torsional angle in the horizontal axis corresponds to the rotational angle of the steering wheel, though the torque in the torque-torsional angle diagrams is a value measured for the constant velocity joint itself, differing from the so-called steering force in a steering device mounted in an automobile. As shown in Fig. 1A, the torque-torsional angle curve is decreased in slope in the vicinity of torque 0. Specifically, it is preferable that it be set in the range from 1.5 to 6.0 Nm/deg. Fig. 1B shows a comparative example in which there is a region where the slope is 0 over a given torsional angle in the vicinity of torque 0. In this region, the steering wheel turns with torque 0. In other words, the steering wheel turns turn with no resistance, a fact which is recognized as a circumferential play which degrades the feeling characteristics.